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(21) International Application Number: PCT/US99/08606 (22) International Filing Date: 20 April 1999 (20.04.99) (30) Priority Data: 09/064,413 22 April 1998 (22.04.98) US (71) Applicants: THE GOVERNMENT OF THE UNITED STATES OF AMERICA, represented by THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES [US/US]; National Institutes of Health, Suite 325, 6011 Executive Boulevard, Rockville, MD 20852-3804 (US). THE UAB RESEARCH FOUNDATION [US/US]; 707 20th Street South, AB 1120 G, Birmingham, AL 32594-0111 (US). (72) Inventors: NEVILLE, David, M.; 9624 Parkwood Drive, Bethesda, MD 20814 (US). THOMAS, Judith, M.; 2117 Brook Highland Ridge, Birmingham, AL 35242 (US). THOMAS, Francis, T.; 2117 Brook Highland Ridge, Birmingham, AL 35242 (US). (74) Agent: SPRATT, Gwendolyn, D.; Needle & Rosenberg, P.C., Suite 1200, 127 Peachtree Street, N.E., Atlanta, GA 30303-1811 (US).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>
(54) Title: USE OF IMMUNOTOXINS TO INDUCE IMMUNE TOLERANCE TO PANCREATIC ISLET TRANSPLANTATION (57) Abstract <p>The invention provides a method of treating diabetes in a subject, comprising administering to the diabetic subject an immunotoxin, thereby reducing the subject's T-cell population, and administering to the subject pancreatic islet cells from a donor. The immune tolerance inducing treatment regimen, used optionally with adjunct immunosuppressive agents, prevents pancreatic islet cell rejection while maintaining long term islet cell function following xenogenic and allogeneic pancreatic islet cell transplantation. Thus, the methods of the present invention provide a means for treating diabetes, wherein the need for exogenous insulin or immunosuppressive agents is decreased or eliminated. Also provided is a method of inhibiting a rejection response of a transplant recipient, comprising administering an immunotoxin during the peritransplant period, thereby transiently reducing the number of T-cell lymphocytes and promoting long-term survival of the transplant.</p>		